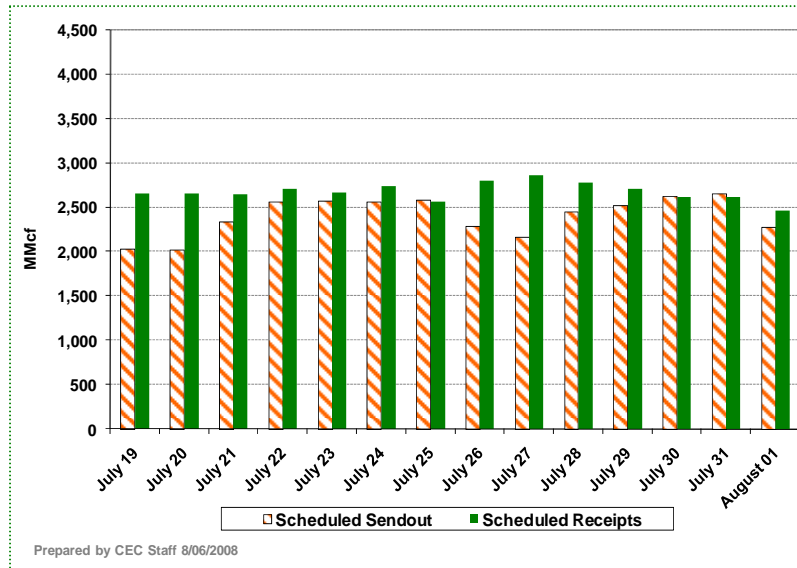




# Bi-Weekly Natural Gas Report

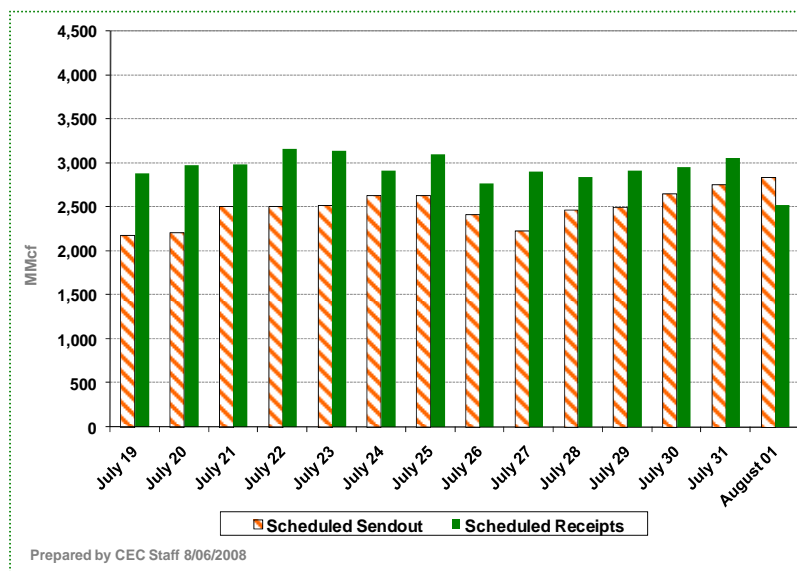
Prepared by California Energy Commission Staff  
Electricity Supply Analysis Division – Electricity Analysis Office  
July 19 – August 1, 2008 – Issue # 1

## PG&E's Natural Gas Receipts and Deliveries



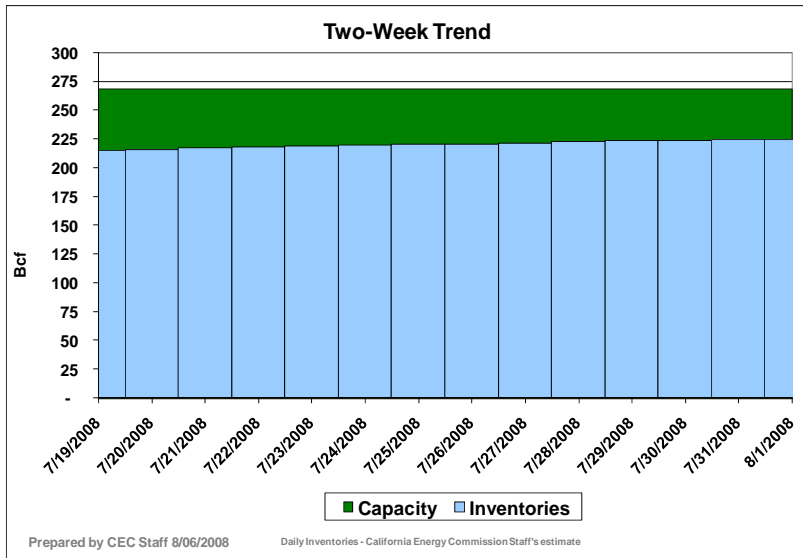
To prepare for the cold winter months, when demand and prices for natural gas reach annual peaks, utilities receive more natural gas during the spring and summer months than they send out to customers, storing the excess gas in underground fields. This chart shows that natural gas receipts during July 19 – August 1 for Pacific Gas and Electric Co. averaged 2,674 million cubic feet per day (MMcf/d), while scheduled sendouts averaged only 2,396 MMcf/d. As a result, PG&E added 3,891 MMcf to their reserves. Daily sendouts increase when customers demand more natural gas to heat their homes and workspaces during colder weather, or when natural gas-fired power plants boost electricity generation to supply air conditioners as temperatures rise. Central Valley temperatures exceeding 90° Fahrenheit explain the higher sendouts on July 22 – 25, and July 30 – 31.

## SoCalGas' Natural Gas Receipts and Deliveries



Southern California Gas Co. also prepares for the winter months by scheduling additional natural gas receipts and storage. This chart shows that natural gas receipts during July 19 – August 1 averaged 2,938 MMcf/d, while scheduled sendouts averaged only 2,506 MMcf/d. This added 6,045 MMcf to SoCalGas' reserves. However, temperatures shot up across inland California, especially in the Desert Southwest, where local highs often exceeded 100 degrees. This prompted high sendouts to fuel natural gas-fired power plants to supply electricity for increased air conditioning load peaking July 25 and August 1.

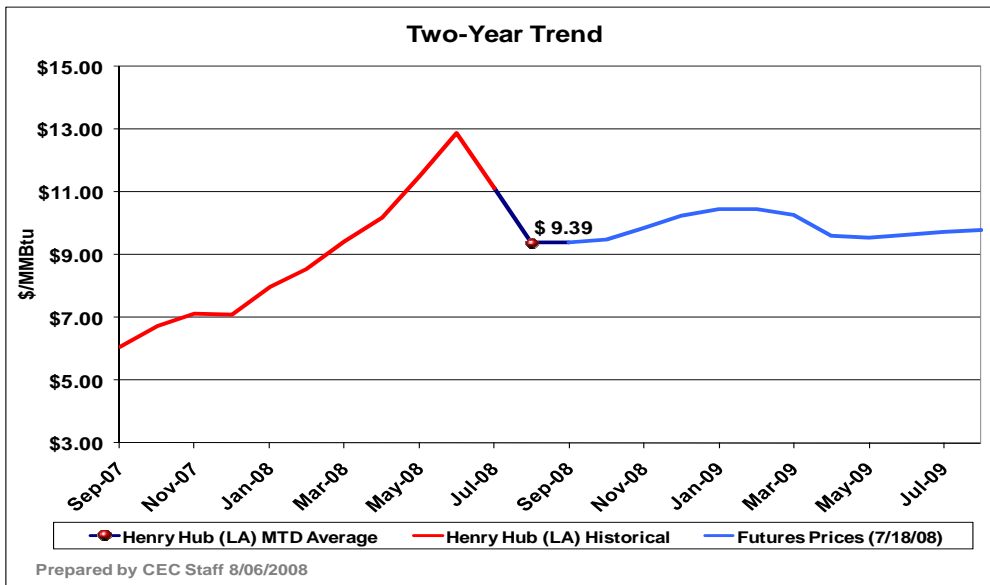
## California Daily Storage Inventories



The utilities' policy of adding natural gas to storage during the spring and early summer months increases the utilities' inventories for the high-demand winter months. Total natural gas inventories bottomed out February 29 at 83.5 billion cubic feet (Bcf), and have been rising since. This chart shows that utility natural gas inventories began July 19 at 214.7 Bcf and ended August 1 at 224.5 Bcf.

This process usually lowers utilities' natural gas costs, and can reduce costs for their customers.

## Historical & Futures Settlement Prices



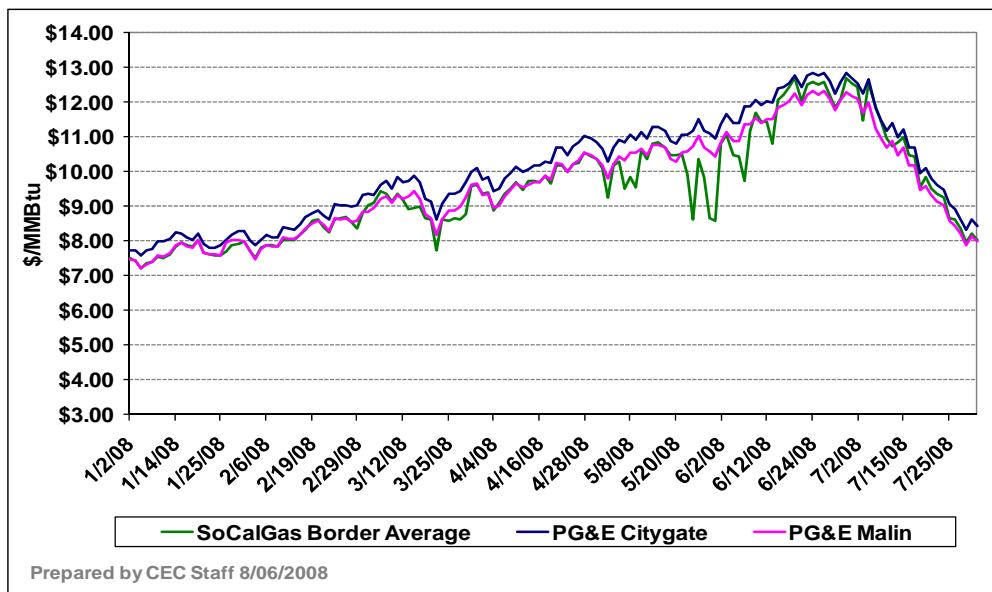
### Henry Hub Month-to-Date Average Spot Prices

Aug	\$	Aug	\$
1	9.39	10	
2		11	
3		15	
7		16	
8		17	
9		18	
MTD Average		\$9.39	

MTD Average = Month-to-Date Average, and is the average of Aug 1 spot natural gas prices at the close of each day.

The NYMEX uses prices for natural gas delivered at Henry Hub, Louisiana, as the benchmark price for that commodity in North America. It is the largest trading point in volume for natural gas on the continent. The market outlook for future natural gas prices over the next twelve months would appear to be influenced by seasonal demand only, with prices peaking in the coming winter, and then falling spring 2009. However, prices July 2009 are expected to be \$1.41 lower than the average price paid on the spot market July 2008. Futures contracts for delivery in July 2009 sold on July 18, 2008, for \$10.23/MMBtu. This suggests an end to the long-term trend that began in September 2001, during which spot prices (a wholesale price) soared from \$2/MMBtu to recent prices near \$12/MMBtu. Futures contract prices are the best predictors of the prices utilities and other market participants will have to pay, but they have no immediate effect on monthly utility customer rates, because those are regulated.

### Natural Gas Daily Spot Prices

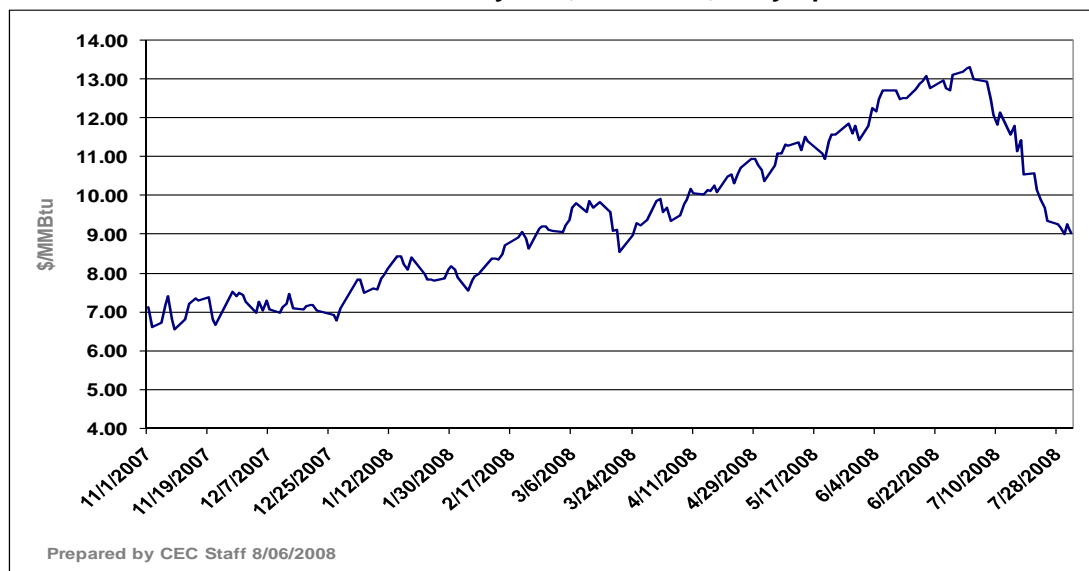


#### Daily Data

Jul	Topock	PG&E City-gate	PG&E Malin
21	9.85	10.1	9.58
22	9.51	9.80	9.32
23	9.36	9.61	9.11
24	9.26	9.47	9.02
25	8.64	9.04	8.55
28	8.62	8.91	8.40
29	8.37	8.62	8.18
30	7.96	8.32	7.86
31	8.19	8.60	8.13
Aug	Topock	PG&E City-gate	PG&E Malin
1	8.01	8.41	7.96

Average daily spot prices paid at the three major California pricing points are high enough that they might be spurring investment in new fields, increased production at existing fields, and promoting siting of new liquefied natural gas (LNG) import terminals. However, these high prices have also prompted consumers to conserve, driving prices over the past month down. Occasionally, price differences between these three points are significant. Natural gas for next-day delivery at the PG&E Citygate or Malin, Oregon, points sold for as much as \$2/MMBtu more than the SoCalGas Border Average price on May 23 and 29. These reflect differences in pipeline transport costs and demand in local markets served by natural gas delivered at these points.

### Henry Hub, Louisiana, Daily Spot Price

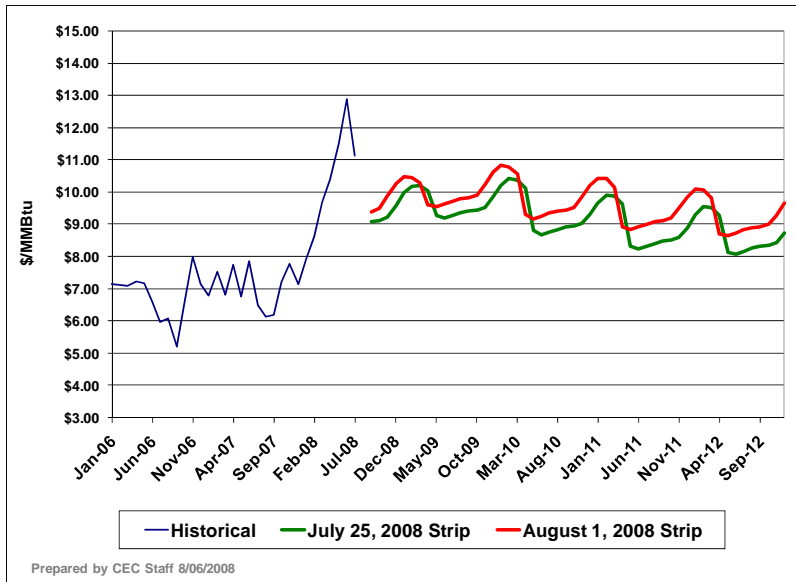


#### Daily Data

Jul	Henry Hub
21	10.58
22	10.16
23	9.89
24	9.70
25	9.34
28	9.26
29	9.17
30	9.01
31	9.26
Aug	Henry Hub
1	9.05

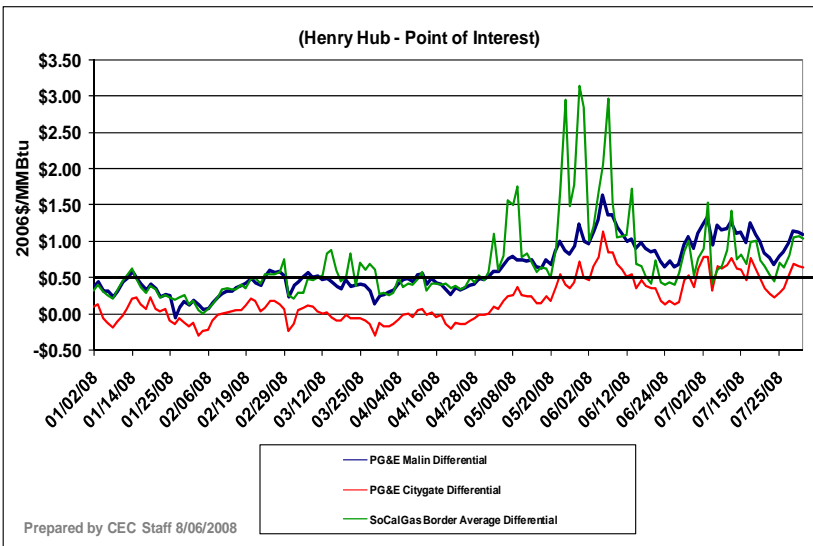
North American natural gas demand remains strong, pushing Henry Hub prices up at rates similar to the three California import points. Prices in Europe and Japan this year have mostly remained at least \$1/MMBtu higher, diverting liquefied natural gas (LNG) cargoes away from North America to serve these markets. As more LNG processing facilities come on-line to meet increasing global demand, this \$1 difference should decline, attracting more LNG imports to North America. Indeed, price differences between North American and other global markets narrowed to less than a dollar in June 2008.

## Historical & Forward NYMEX Natural Gas Settlement Prices



On August 1, NYMEX traders expected mostly higher prices for futures contracts expiring through 2012 (August 1, 2008, Strip) than they did for the same futures traded on July 25 (July 25, 2008, Strip). The sinusoidal (oscillating waveform) price trends reflect traders' expectation that, as usual, winter gas prices will be significantly higher than summer prices. Utilities like PG&E and SoCalGas, seeking to lower costs by negotiating contracts to supply them with natural gas, will face prices guided by these futures trends.

## Basis Differentials from Spot Prices at Henry Hub, Louisiana



SoCalGas Border Average spot prices from May 9 to May 30 plunged as much as \$3.15 below the price for natural gas sold at Henry Hub. PG&E Malin and Citygate prices fell by smaller amounts relative to Henry Hub prices during the same period. Increased demand due to rapidly warming temperatures, combined with constrained available capacity on Rocky Mountain supply pipelines, forced suppliers to lower prices to schedule gas for delivery to buyers. Contrasting with this basis volatility, price differentials remained moderate through April 30. Natural gas delivered at the PG&E Citygate sold for prices varying by an average of two cents from Henry Hub prices, while natural gas delivered at the other two points averaged less than forty cents below Henry Hub prices.

### Source Data:

[www.pge.com](http://www.pge.com) • <http://www.nymex.com> • <https://ejenvoy.sempa.com> • <https://www.theice.com>

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